

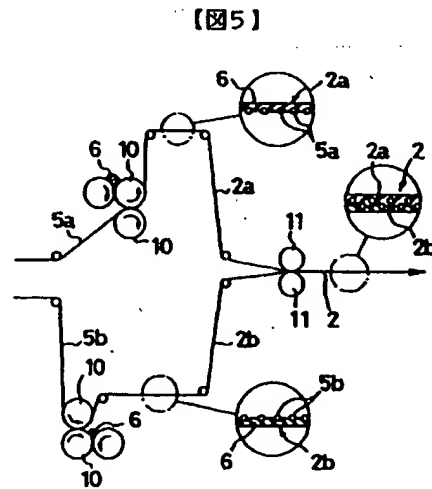
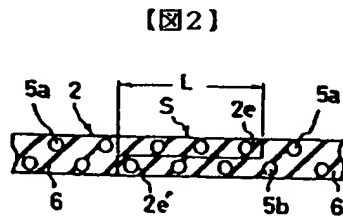
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By the present amendment, claims 24-26 and 28 have been cancelled. Upon entry of this amendment, claims 2-18 and 21-23 will be pending in the application.¹

Claim Rejections - 35 USC § 102 / § 103

Claims 2-10 and 21-23 have been rejected as being anticipated by Japanese Patent Application 5-294104. Claims 2-10 and 21-23 have been rejected as being obvious over this reference either alone or in view of U.S. Patent No. 4,274,821 to Kiemer and U.S. Patent No. 4,300,878 to Ible.²

The Japanese reference discloses a carcass layer 2 comprising a first row of cords 5a and a second row of cords 5b. (See Figure 2, below.) According to the Examiner's translation, this "layer" is actually two "half layers" 2a and 2b joined together. Specifically, a calendering roll 10 covers the upper side of the cords 5a with rubber 6 to form the half layer 2a, and another calendering roll 10 covers the lower side of the cords 5b with rubber 6 to form the half layer 2b. The half layers 2a and 2b are then "laminated" together with a calendering roll 11. (See Figure 5, below.)



¹Claims 11-18 have been withdrawn from consideration. These claims depend upon claim 21 whereby, upon allowance of claim 21, rejoinder of claims 11-18 is respectfully requested.

²Specifically, claims 2-10, 21-26, and 28 have been rejected as being unpatentable over Japanese Patent Application 5-294104 in view of U.S. Patent No. 4,274,821 to Kiemer and U.S. Patent No. 4,300,878 to Ible. Claims 8-10, 26, and 28 have been rejected as being unpatentable over Japanese Patent Application 5-294104. Claim 7 has been rejected as being unpatentable over Japanese Patent Application 5-294104.

Accordingly, the Japanese reference does not show or suggest a body ply comprising an elastomeric sheet and a plurality of rows of reinforcement cords embedded in the elastomeric sheet. Instead, this reference specifically teaches two elastomeric sheets, each having one row of reinforcement cords.³ In contrast, independent claim 21 specifies that embedding of the cords is accomplished by extruding an elastomeric material between and around the cords in the plurality of rows.⁴

The Examiner contends that in the Japanese method, "the rubber material still hot from the calender would flow around the cords of both layers, thus providing a reasonable basis for inferring that the body ply of this embodiment would be structurally indistinguishable from the claimed extruded body." It is respectfully submitted that, although there might be some "flow," the final profile would be significantly different than that found in the claimed extruded body. In fact, the Japanese reference itself appears to assert that its resultant product is structurally different from body plies that are not made with two separate sheets or layers. The Examiner is also asked to please note that the claims are now limited to a "green tire" and methods of making such a green tire.

Kiemer and Ible are cited as showing that "extrusion is a notoriously well known technique for manufacturing cord reinforced plies for tires" and that it therefore would have been obvious "to use such well known alternative technique to manufacture the body ply." However, these references could only accommodate one row of reinforcement cords, and there are absolutely no teachings in the prior art on modifying such an extrusion apparatus to accommodate a plurality of rows.

³As was explained in the background portion of applicant's specification, "[t]ypically, body ply material is manufactured by calendering a single row of reinforcement cords in a rubber material," and "[w]hen a radial tire construction requires a double layer of reinforcement cords in the tire's inner carcass, two separate body plies are commonly used to meet this requirement." The Japanese reference appears to reflect this "typical" approach as to the incorporation of a plurality of rows of reinforcement cords into a single body ply.

⁴It is respectfully submitted that calender embedding and extrusion embedding result in different respective structural outcomes in the body ply, which would be ascertainable by inspection of the tire.

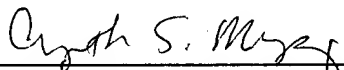
Conclusion

This application is now believed to be in condition for allowance and an early action to that effect is earnestly solicited.

In the event any fee or additional fee is due in connection with the filing of this paper, the Commissioner is authorized to charge those fees to our Deposit Account No. 18-0988 (under the above Docket Number). In the event an extension of time is needed to make the filing of this paper timely and no separate petition is attached, please consider this a petition for the requisite extension and charge the fee to our Deposit Account No. 18-0988 (under the above Docket Number).

Respectfully submitted,

RENNER, OTTO, BOISSELLE & SKLAR, LLP

By 
Cynthia S. Murphy, Reg. No. 33,430

1621 Euclid Avenue
Nineteenth Floor
Cleveland, Ohio 44115
(216) 621-1113

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